

What is claimed is:

1. A method of treating a viral infection in a subject, said method comprising
5 treating the subject with a therapeutically effective amount of a sulfur-containing (H^+/K^+)ATPase inhibitor.

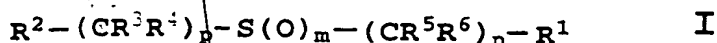
2. The method of Claim 1 wherein the
10 compound contains a sulfoxide.

3. The method of Claim 1 wherein the subject is infected with a DNA virus.

15 4. The method of Claim 3 wherein the
subject is infected with a herpesvirus.

20 5. A method of treating viral infection in a subject, said method comprising treating the subject with an effective amount of a compound which inhibits an $(H^+/K^+)ATPase$ and a viral protease.

6. A method of treating viral infection in a subject, said method comprising treating said subject with an effective amount of a compound of Formula I



wherein R^1 is selected from alkoxy, alkoxy carbonyl, dialkylamino, aryl and heteroaryl, wherein R^1 is optionally substituted at a substitutable position with one or more radicals selected from alkoxy, aminoalkoxy optionally substituted on the nitrogen atom with alkyl, cycloalkyl, and aralkyl, hydroxyl, cyano, nitro, alkyl, halo, haloalkyl, haloalkoxy, alkanoyl, cycloalkylalkoxy, carboxyl, acyl, amide, alkylamide, aralkoxy, alkenyloxy, alkynyloxy, sulfonamidyl, dialkylsulfonamidyl, heterocyclic, aralkyl, heteroaralkyl, alkoxy carbonyl, heteroaryl, alkylthio, alkylsulfenyl, alkylsulfonyl, alkenylthio, arylthio, aralkylthio, cycloalkylthio, alkylimino and amino optionally substituted with a radical selected from alkyl, aralkyl, aryl, alkenyl, alkynyl, cycloalkyl, acyl, cycloalkenyl, hydroxyalkyl, alkoxy carbonyl and alkoxyalkyl;

wherein R^2 is heteroaryl, wherein R^2 is optionally substituted at a substitutable position with one or more radicals selected from alkoxy, amino, cyano, nitro, hydroxyl, alkyl, cycloalkyl, halo, haloalkyl, haloalkoxy, carboxyl, alkanoyl, acyl, alkylamino, arylamino, alkylarylamino, alkanoylamino, alkylaminoalkyl, amide, alkylamide, alkoxy carbonyl, aryloxy carbonyl, aralkoxy carbonyl, alkylcarbonyl, cycloalkylcarbonyl, alkylcarbonylalkyl, alkoxy carbonylalkyl, dialkylcarbonyl, carbamoyloxy, aryloxy, aralkoxy, alkenyloxy, alkynyloxy, acyloxy, cycloalkylalkoxy,

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aralkyl, aryl, aroyl, alkoxyalkyl, hydroxyalkyl,
heterocyclic, heteroaralkyl, alkylthio,
alkylsulfinyl, alkylsulfonyl, arylthio,
arylsulfinyl, alkylsulfonyl, sulfonamidyl and
5 alkylsulfonamidyl;

wherein each of R³, R⁴, R⁵ and R⁶ is
independently selected from hydrido, alkyl, aryl
and aralkyl; and

wherein each of m, n and p is a number
10 independently selected from 0, 1 and 2;

provided that when R¹ is phenyl, R² is
not pyridyl or 1-(β-D-ribofuranosyl)benzimidazole
when m is 0 or 2;

or a pharmaceutically acceptable salt or
15 prodrug thereof.

7. Method of Claim 6 wherein R¹ is
selected from lower alkoxy, lower alkoxy carbonyl,
lower dialkylamino, phenyl, naphthyl, thiazolyl,
20 thiazolinyl, thiadiazolyl, oxazolyl, isoxazolyl,
pyrazolyl, imidazolyl, imidazolinyl, pyridyl,
quinolyl, dihydroquinolyl, tetrahydroquinolyl,
isoquinolyl, azaquinolyl, azaisoquinolyl,
tetrahydroisoquinolyl, thiatetrahydroisoquinolyl,
25 imidazopyridyl, azachromanyl, cycloheptenopyridine,
benzimidazolyl, benzothiazolyl, benzoxazinyl,
pyridazinyl, purinyl, thienyl, furyl,
azaimidazopyridyl, piperidinyl, thienopyridinyl,
dihydrothienopyridinyl, carbostyryl, pyrimidyl and
30 pyrazinyl, wherein R¹ is optionally substituted at
a substitutable position with one or more radicals
selected from lower alkoxy, lower aminoalkoxy
optionally substituted on the nitrogen atom with
lower alkyl, lower cycloalkyl and lower aralkyl,
35 cyano, nitro, hydroxyl, lower alkyl, halo, lower
haloalkyl, lower haloalkoxy, lower
cycloalkylalkoxy, carboxyl, acyl, lower alkanoyl,

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amide, lower alkylamide, lower aralkoxy, lower alkenyloxy, lower alkynyloxy, sulfonamidyl, lower dialkylsulfonamidyl, 5 to 20 membered heterocyclic, lower aralkyl, lower heteroaralkyl, lower

5 alkoxy carbonyl, 5 to 8 membered heteroaryl, lower alkylthio, lower alkylsulfinyl, lower alkylsulfonyl, lower alkenylthio, lower arylthio, lower aralkylthio, lower cycloalkylthio, lower alkylimino and amino optionally substituted with a

10 radical selected from lower alkyl, lower aralkyl, phenyl, lower alkenyl, lower alkynyl, lower cycloalkyl, acyl, lower cycloalkenyl, lower hydroxyalkyl, lower alkoxy carbonyl and lower alkoxyalkyl; wherein R^2 is selected from nitrogen-

15 containing heteroaryl, wherein R^2 is optionally substituted at a substitutable position with one or more radicals selected from lower alkoxy, amino, cyano, nitro, hydroxyl, lower alkyl, lower cycloalkyl, halo, lower haloalkyl, lower

20 haloalkoxy, carboxyl, lower alkanoyl, acyl, lower alkylamino, lower arylamino, lower alkylarylamino, lower alkanoylamino, lower alkylaminoalkyl, amide, lower alkylamide, lower alkoxy carbonyl, lower aryloxy carbonyl, lower aralkoxy carbonyl, lower

25 alkyl carbonyl, lower cycloalkyl carbonyl, lower alkyl carbonylalkyl, lower alkoxy carbonylalkyl, lower dialkyl carbamoyl, carbanoyloxy, lower aryloxy, lower aralkoxy, lower alkenyloxy, lower alkynyloxy, acyloxy, lower cycloalkylalkoxy, lower

30 aralkyl, optionally substituted lower aryl, lower aroyl, lower alkoxyalkyl, lower hydroxyalkyl, 5 to 20 membered heterocyclic, lower heteroaralkyl, lower alkylthio, lower alkylsulfinyl, lower alkylsulfonyl, lower arylthio, lower arylsulfinyl,

35 lower arylsulfonyl, sulfonamidyl and lower alkylsulfonamidyl; and wherein each of R^3 , R^4 , R^5 and R^6 is independently selected from hydrido,

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lower alkyl, phenyl, naphthyl and lower aralkyl; or a pharmaceutically acceptable salt thereof.

8. Method of Claim 7 wherein R¹ is
5 selected from phenyl, naphthyl, thiazolyl,
thiazolinyl, thiadiazolyl, oxazolyl, isoxazolyl,
pyrazolyl, imidazolyl, imidazolinyl, pyridyl,
quinolyl, dihydroquinolyl, tetrahydroquinolyl,
isoquinolyl, azaquinolyl, azaisoquinolyl,
10 tetrahydroisoquinolyl, thiatetrahydroisoquinolyl,
imidazopyridyl, azachromanyl, cycloheptenopyridine,
benzimidazolyl, benzothiazolyl, benzoxazinyl,
pyridazinyl, purinyl, thienyl, furyl,
azaimidazopyridyl, piperidinyl, thienopyridinyl,
15 dihydrothienopyridinyl, carbostyryl, pyrimidyl and
pyrazinyl, wherein R¹ is optionally substituted at
a substitutable position with one or more radicals
selected from methoxy, ethoxy, propoxy, butoxy,
isopropoxy, tert-butoxy, aminomethoxy optionally
20 substituted on the nitrogen atom with methyl,
ethyl, propyl, butyl, pentyl, isopropyl, isobutyl,
tert-butyl, cyclohexyl, cyclopropyl and benzyl,
hydroxyl, amino optionally substituted with a
radical selected from methyl, ethyl, propyl, butyl,
25 pentyl, isopropyl, isobutyl, tert-butyl, benzyl,
phenethyl, phenyl, butene, pentene, isopropylene,
isobutylene, propargyl, cyclopropyl, cyclobutyl,
cyclopentyl, cyclohexyl, formyl, acetyl,
cyclobutenyl, cyclopentenyl, cyclohexenyl,
30 hydroxymethyl, methoxycarbonyl, ethoxycarbonyl,
isopropoxycarbonyl, tert-butoxycarbonyl,
propoxycarbonyl, n-butoxycarbonyl,
isobutoxycarbonyl, pentoxycarbonyl, and
methoxymethyl, cyano, nitro, methyl, ethyl, propyl,
35 butyl, pentyl, isopropyl, isobutyl, tert-butyl,
fluoro, chloro, bromo, iodo, fluoromethyl,
difluoromethyl, trifluoromethyl, dichloromethyl,

trichloromethyl, pentafluoroethyl,
heptafluoropropyl, difluorochloromethyl,
dichlorofluoromethyl, difluoroethyl,
difluoropropyl, dichloroethyl, dichloropropyl,
5 trifluoromethoxy, cyclohexylmethoxy, carboxyl,
formyl, acetyl, propionyl, amide, methylamide,
dimethylamide, benzyloxy, sulfonamidyl,
dimethylsulfonamidyl, morpholinyl, pyrrolidinyl,
piperazinyl, piperidyl, benzyl, methoxycarbonyl,
10 ethoxycarbonyl, pyridyl, methylthio,
methylsulfinyl, methylsulfonyl, phenylthio,
benzylthio, cyclohexylthio and methylimino; wherein
R² is selected from pyridyl, indolyl, imidazolyl,
benzimidazolyl, naphthoimidazolyl, 1,3-
15 dioxolobenximidazolyl, imidazopyridyl,
imidazoquinolinyl, dihydroimidazoquinolinyl,
cycloheptoimidazolyl,
cyclooxaundecanobenzimidazolyl, benzoxazolyl,
benzothiazolyl, indolyl, thienoimidazolyl,
20 pyridopyrazinyl, quinolinyl, quinoxalinyl,
quinazolinyl, quinazolinonyl, triazolyl,
tetrazolyl, oxazolyl, purinyl, indenoimidazolyl,
thiadiazolyl, thiazolylpyridyl, pyridyl,
pyrimidinyl, pyranobenzimidazolyl,
25 thiopyranbenzimidazolyl, indolbenzimidazole,
tetrahydroimidazoquinolinyl, wherein R² is
optionally substituted at a substitutable position
with one or more radicals selected from methoxy,
ethoxy, propoxy, butoxy, isopropoxy, tert-butoxy,
30 amino, cyano, nitro, hydroxyl, methyl, ethyl,
propyl, butyl, pentyl, isopropyl, isobutyl, tert-
butyl, cyclohexyl, cyclopropyl, cyclobutyl, fluoro,
chloro, bromo, iodo, fluoromethyl, difluoromethyl,
trifluoromethyl, dichloromethyl, trichloromethyl,
35 pentafluoroethyl, heptafluoropropyl,
difluorochloromethyl, dichlorofluoromethyl,
difluoroethyl, difluoropropyl, dichloroethyl,

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5 dichloropropyl, trifluoromethoxy, trifluoroethoxy, carboxyl, formyl, acetyl, propionyl, butyryl, N-methylamino, N-ethylamino, N-propylamino, N-butylamino, N-tert-butylamino, N-pentylamino, N-hexylamino, N,N-dimethylamino, phenylamino, N-methyl-N-phenylamino, methylaminomethyl, amide, N-methylamide, N,N-dimethylamide, methoxycarbonyl, ethoxycarbonyl, isopropoxycarbonyl, tert-butoxycarbonyl, propoxycarbonyl, n-butoxycarbonyl, isobutoxycarbonyl, pentoxycarbonyl, phenoxycarbonyl, benzyloxycarbonyl, methylcarbonyl, cyclohexylcarbonyl, methylcarbonylmethyl, methoxycarbonylmethyl, N,N-dimethylcarbamoyl, carbamoyloxy, phenoxy, benzoxy, benzyl, phenethyl, 15 phenyl, benzoyl, methoxymethyl, hydroxymethyl, morpholinyl, pyrrolidinyl, piperazinyl, piperidyl, methylthio, ethylthio, methylsulfinyl, ethylsulfinyl, methylsulfonyl, phenylthio, phenylsulfinyl, phenylsulfonyl, sulfonamidyl, 20 methylsulfonamidyl and N,N-dimethylsulfonamidyl; and wherein each of R³, R⁴, R⁵ and R⁶ is independently selected from hydrido, methyl, ethyl, propyl, butyl, pentyl, isopropyl, isobutyl, tert-butyl, phenyl and benzyl; or a pharmaceutically 25 acceptable salt thereof.

9. Method of Claim 8 selected from compounds, and their pharmaceutically acceptable salts, of the group selected from:

- 30 [2-[(2-N-isobutyl-N-methylamino)-benzyl]sulfinyl]-1H-benzimidazole;
- 2-[[3-methylpyridin-2-ylmethyl]sulfinyl]-1H-benzimidazole;
- 35 2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-1H-benzimidazole;

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- 2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-5-methyl-1H-benzimidazole;
- 5 2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-5-methoxy-1H-benzimidazole;
- 5-chloro-2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-5-trifluoromethyl-1H-benzimidazole;
- 10 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-1H-benzimidazole;
- 15 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-5-methoxy-1H-benzimidazole;
- 5-ethoxy-2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-4-methyl-1H-benzimidazole;
- 20 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-5-methyl-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-5,6-dimethyl-1H-benzimidazole;
- 25 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-5,6-dimethoxy-1H-benzimidazole;
- 5-chloro-2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-5-trifluoromethyl-1H-benzimidazole;
- 30 2-[[2,3-dimethylimidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 2-[[3-methylimidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 35 2-[[2-phenylimidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;

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- 5 2-[[[3-(3-(trifluoromethyl)phenyl)imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 10 5-methyl-2-[[[3-(3-(trifluoromethyl)phenyl)imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 15 5-chloro-2-[[[3-(3-(trifluoromethyl)phenyl)imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 2-[[[3-(4-(trifluoromethyl)phenyl)imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 20 5-chloro-2-[[[3-(4-(trifluoromethyl)phenyl)imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 4-[8-[(1H-benzimidazol-2-yl)sulfinyl)methyl]imidazo[1,2-a]pyridin-3-yl]benzoate;
- 2-[[[3-(4-chlorophenyl)imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 25 2-[[[3-(4-methylphenyl)imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-5-yl)methyl]sulfinyl)-1H-benzimidazole;
- 2-((n-butoxycarbonylmethyl)sulfinyl)thiazolo(5,4-b)pyridine;
- 30 5-chloro-2-((2-ethoxyethyl)sulfinyl)benzothiazole;
- 4,6-dimethyl-2-(((imidazo(1,2-a)pyridin-2-yl)methyl)thio)-1H-benzimidazole;
- 2-[3-methyl-4-(2-(N-benzyl-N-cyclohexylamino)-ethoxy)pyridyl]methylthio-1H-benzimidazole;
- 35 ethyl 2-[(1H-benzimidazol-2-yl)thiomethyl]-4-methyl-amino-5-pyrimidine carboxylate;
- 9-(benzimidazol-2-yl)sulfinyl-4-methoxy-2,3-

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Sub. (2)

cycloheptenopyridine;

2-(5-fluoro-2-(4-methoxy-2-pyridyl))-

phenylsulfinyl)-1H-benzimidazole;

5-difluoromethoxy-2-(((3,4-dimethoxy-2-pyridinyl)

5 methyl)sulfonyl)-1H-benzimidazole;

2-(((4-difluoromethoxy-3-methyl-2-pyridyl)

methylsulfinyl) benzimidazole;

2-[4(3-methoxypropoxy)-3-methylpyridine-2-yl]

methanolsulfinyl-1H-imidazole;

10 2-((6-azachroman-5-ylmethyl)sulfinyl)-

benzimidazole;

5-carbomethoxy-6-methyl-2-(((3,4-dimethoxy-2-

pyridinyl)methyl)sulfinyl-1H-benzimidazole;

5-carbomethoxy-6-methyl-2-(((3,4-dimethoxy-2-

15 pyridinyl)methyl)sulfinyl)-1H-benzimidazol-1-

yl-methyl ethyl carbonate;

2-((3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl)

methanysulfinyl) benzimidazole;

4-fluoro-2-(((4-methoxy-2-pyridinyl)methyl)

20 sulfinyl-1H-benzimidazol-1-yl-methyl-

ethylcarbonate;

2-[3-methyl-4-(1-benzyl-4-piperidyl)oxy-2-pyridyl]

methylthio-1H-benzimidazole:

2-(3-methyl-4-(2-(N-methyl-N-(4-methyl-benzyl))

25 amino)ethoxy)-2-pyridyl)methylsulfonyl-1H-

benzimidazole;

2-(4-methoxy-6-methyl-2-pyrimidinyl)methylthio-1H-

benzimidazole;

2-[2-[N-4-(3-fluorophenyl)-butyl-N-methyl]

30 aminoethyl]thio-(1H)-benzimidazole;

5-chloro-2-(3,4-dimethoxy-2-pyridylmethylsulfinyl)-

1H-benzimidazole;

5-fluoro-2-(4-cyclopropylmethoxy-2-pyridylmethyl-

sulfinyl)-1H-benzimidazole;

35 4-fluoro-2-(4-methoxy-2-pyridylmethylsulfinyl)-

1H-benzimidazole;

2-(((4-methoxy-3,5-dimethyl-2-pyridinyl)-methyl)-

- 5-sulfinyl)-5-methoxy-1H-benzimidazole;
 5-hydroxymethyl-2-((3,5-dimethyl-4-methoxy-2-
 pyridyl)methylthio)-1H-benzimidazole;
 2-(4-ethylthio-3-methylpyridin-2-yl-
 methyl)sulfinyl-benzimidazole;
 2-(((4-(2-benzyloxyethoxy)-3-methyl-2-pyridyl)
 methylthio)benzimidazole;
 2-[[2-[N-(2-hydroxyethyl)-N-methylamino]-5-methoxy]
 benzylsulfinyl]benzimidazole;
 2-[2-(3,5-dimethyl-4-ethoxy)pyridylmethylsulfinyl]-
 5-methoxy-imidazo(4,5-b)pyridine;
 2-(5-benzyl-4-chloro-6-methyl-2-pyrimidinyl)
 methylthio-1H-benzimidazole;
 2,2-difluoro-6-((5-benzyloxy-4-methoxy-2-pyridyl)
 methylthio)-5H-(1,3)-dioxolo(4,5-
 f)benzimidazole;
 5-carboethoxy-6-methyl-2-(((3-methyl-2-
 pyridyl)methyl)sulfinyl)-1H-benzimidazole;
 5-(2-benzimidazolylsulfinylmethyl)-3,4-dihydro-
 4-methyl-2H-1,4-benzoxazine;
 2-(3-methyl-4-(2-(N-benzyl-N-methylamino)ethoxy-2-
 pyridyl)methylsulfinyl)-1H-benzimidazole;
 2-(3-methyl-4-(2-(1,2,3,4-tetrahydroisoquinolin-
 2-yl)-ethoxy)-2-pyridyl)methylsulfinyl)-1H-
 benzimidazole;
 2-[1-(3,5-dimethylpyrazolyl)]
 methylthiobenzimidazole;
 2-(3-chloro-4-methoxy-2-picolylthio)-5-methoxy-1H-
 benzimidazole;
 2-(4-(2-ethoxyethoxy)-3-methyl-2-pyridyl)
 methylsulfinyl)-1H-benzimidazole;
 2-(3-methylthieno(2,3-c)pyridin-7-
 yl)methylsulfinyl)-benzimidazole;
 2-(2-dimethylamino-5-methoxybenzylsulfinyl)-5-
 methoxy-benzimidazole;
 2-(2-dimethylamino-5-methylbenzylsulfinyl)-5-
 methoxybenzimidazole;

- 2-[4-(2,3,5-trimethyl)pyridylthio]-5-methoxybenzimidazole;
2-[(2-(4-chlorophenyl)-5-methylimidazol-4-yl)methylthio]benzimidazole;
5 2-(5-hydroxy-1H-benzimidazol-2-ylsulfinylmethyl)-N,N-dimethylbenzenamine;
2-((6-methoxyisoquinolin-1-yl)methylsulfinyl)benzimidazole;
3-(5-methoxy-1H-benzimidazol-2-yl)thiomethylcarbostyryl;
10 5-methoxy-2-(4-dimethylamino-5-fluoro-2-pyridylmethylsulfinyl)-1H-benzimidazole;
2-(2-dimethylaminobenzyl-sulfinyl)-5-cyclopropylmethoxybenzimidazole;
15 2-(3,5-dimethyl-2-pyridylmethylsulfinyl)-5-cyclopropylmethoxy-benzimidazole;
2-[2-(N-cyclohexyl-N-methylamino)benzylsulfonyl]benzimidazole;
8-(5-fluoro-6-methoxy-2-benzimidazolyl)sulfinylmethyl-1-ethyl-4-(N-methyl-N-allyl)amino-1,2,3,4-tetrahydroquinoline;
20 2-(2-benzyloxycarbonylaminobenzylthio)benzimidazole;
2-(2-benzimidazolylmethylthio)pyrimidine;
25 2-(2-dimethylaminobenzylsulfinyl)imidazo[4,5-b]pyridine;
2-(2-pyridylmethylsulfinyl)quinoxaline;
2-methyl-3-(2-pyridylmethylsulfinyl)pyrido[2,3-b]pyrazine;
30 5-acetyl-2-((2-dimethylaminobenzyl)sulfinyl)benzimidazole;
2-((3,5-dimethyl-4-methoxy-2-pyridyl)methylsulfinyl)-5-fluoro-1H-benzimidazole;
2-(3-pyridylmethylthio)-5-methoxybenzimidazole;
35 2-(2-methylaminobenzylsulfinyl)benzimidazole;
5-methoxy-2-(2-dimethylaminobenzylsulfinyl)-1H-benzimidazole;

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- 2-(3,4-dimethoxypyrid-2-ylmethylsulfinyl)-5-trifluoromethyl-benzimidazole;
- 5-methoxy-2-(4-piperidino-2-pyrimidinylmethylsulfinyl)-(1H)-benzimidazole;
- 5 2-[2-(4-benzyloxy)-pyridylmethylsulfinyl]benzimidazole;
- 4-allyloxy-8-(2-benzimidazolyl)thio-3-methyl-5,6,7,8-tetrahydroquinoline;
- 2-[2-(4-methoxy-5-n-pentyl)-pyridylmethylthio]benzimidazole;
- 10 2-(5-bromo-4-piperidino-2-pyridylmethylsulfinyl)-5-methoxy-(1H)-benzimidazole;
- 2-((3,5-dimethyl-4-morpholinopyrid-2-yl)methylsulfinyl)benzimidazole;
- 15 2-((2-pyridinylmethyl)sulfinyl)-1H-benzimidazole-1-methanol;
- 2-((3,4-dihydro-2H-thieno(3,2-c)pyridinylmethylthio)-1H-benzimidazole-1-methanol;
- 2-(4-isopropoxy-2-pyridyl)methylsulfinylbenzimidazole;
- 20 2-((4-fluorobenzyloxy-3-methyl-2-pyridyl)methylsulfinyl)benzimidazole;
- 2-(2-aminobenzylsulfinyl)-benzimidazole;
- N,N-dimethyl-2-(1H-benzimidazol-2-yl-sulfinylmethyl)benzenamine;
- 25 2-((4,5-dimethoxy-2-pyridyl)methylsulfinyl)-5-trifluoromethoxy-1H-benzimidazole;
- 2,2-difluoro-6-((4,5-dimethoxy-2-pyridyl)methylthio)-5H-1,3-dioxolo-(4,5-f)benzimidazole;
- 30 2-((4-morpholinyl-3-ethylpyridin-2-ylmethyl)sulfinyl)-5-trifluoromethylbenzimidazole;
- 2-((4-methoxy-2-pyridyl)methylsulfinyl)-5-trifluoromethoxy-1H-benzimidazole;
- 35 5-cyclopropylcarbonyl-2-((4-methoxy-2-pyridyl)methyl-sulfinyl)-1H-benzimidazole;

2-(2-pyridylmethylsulfinyl)quinoxaline;

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- 2-[(2-pyridyl)methylsulfinyl]thieno[3,4-d]-imidazole;
- 2-(((3,5-dimethyl-4-methoxy-2-pyridyl)methyl)thio)-4,5-diphenyloxazole;
- 5 3,5-dimethyl-4-methoxy-6-(((5-phenyl-1,2,4-triazol-3-yl)-thio)methyl)pyridine;
- 2-(((3,5-dimethyl-4-methoxy-2-pyridyl)methyl)sulfinyl)-4,5-diphenylimidazole;
- 5-(((4,5-diphenyl-2-oxazolyl)sulfinyl)methyl)-2,2-dimethyl-8-methyl-4H-1,3-dioxino(4,5-c)pyridine;
- 10 5-(((3,5-dimethyl-4-methoxy-2-pyridyl)methyl)sulfinyl)-1-methyltetrazole;
- 6-benzoylamino-7-chloro-2-(((3,5-dimethyl-4-methoxy-2-pyridyl)-methyl)thio)benzothiazole;
- 15 2-[[(3,5-dimethyl-4-methoxy-2-pyridyl)-methyl]thio]quinoline;
- 2-[2-(3,5-dimethyl)pyridylmethylsulfinyl]-5-methoxy-imidazo[4,5-b]pyridine;
- 20 5-(4,5-dihydro-2-oxazolyl)-2-((3,5-dimethyl-4-methoxy-2-pyridyl)methylthio)-1H-benzimidazole;
- 2-(2-dimethylaminobenzylsulfinyl)-5-methoxyimidazo[4,5-b]-pyridine;
- 25 3-phenyl-2-(2-pyridylmethylsulfinyl)-4(3H)-quinazolinone;
- 4-amino-2-(2-pyridylmethylthio)quinazoline;
- 2-(4-morpholinyl-2-pyrimidinylmethylthio)thieno(3,4-d)imidazole;
- 30 8-[2'-(N,N-dimethylanily)methylthio]purine;
- 2-[2'-(N,N-dimethylanily)methylthio]thieno-(3,4-d)-imidazole;
- 2-(4-methoxy-2-picolinylthio)-1H-thieno[3,4-d]imidazole;
- 35 2-(2-pyridylmethyl)thio-8H-indeno(1,2-d)imidazole;
- 2-(4-methoxy-5-chloro-2-picolylthio)-1H-thieno(3,4-d)imidazole;

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- 2-[2-(1-pyrrolidinyl)benzylthio]
cycloheptoimidazole;
2-(2-acetylaminophenyl)methylthio
cycloheptoimidazole;
5 2-amino-5-(2-(2-pyridyl)ethylthio)-1,3,4-
thiadiazole;
2-gernaylthio-benzimidazole;
2-(2-chlorobenzylthio)-8,8-dimethyl-6-oxo-5,6,7,8-
tetrahydro-3H-imidazo[4,5-g]quinoline;
10 8-(2-pyrimidinyl-sulfinyl)quinoline;
2-((3-methyl-2-pyridyl)methylsulfinyl)pyrano(2,3-f)
benzimidazole;
2-[(2-isobutylamino)benzylsulfinyl]imidazole;
ethyl 2-((1H-benzimidazol-2-yl)-sulfinylmethyl)-4-
15 dimethylamino-5-pyrimidinecarboxylate;
2-((2-ethoxyethyl)sulfinyl)-4-(3-pyridyl)thiazole;
2-[2-(2-propynylamino)benzylsulfinyl]imidazole;
2-(2-(2-methoxyethylamino)benzylsulfinyl)imidazole;
1-(2-pyridyl)-2-(3-dimethylamino)benzylsulfinyl)
20 imidazole;
2-(2-methylaminobenzylthio)-4,5,6,7-tetrahydro-1H-
benzimidazole;
4,5-diphenyl-2-(2-pyridylmethyl)-thioimidazole;
4-phenyl-2-(2-pyridylmethyl)thioimidazole;
25 4,5-bis(4-methoxyphenyl)-2-(2-
thienylthio)imidazole;
2-(3-chloro-2-pyridinylthiomethyl)-4,5-dihydro-1H-
imidazole;
1-methyl-2-(2-pyrimidinylthiomethyl)-5-nitro-
30 imidazole;
1-methyl-2-(2-pyridylsulfonylmethyl)-5-
nitroimidazole;
1-methyl-2-(5-bromo-2-pyridylthiomethyl)-5-nitro-
imidazole;
35 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]
benzenamine;

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35 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-ethylbenzenamine;

[illegible]

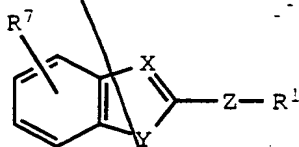
Sub. 27
6-[[[5-(hydroxymethyl)-1H-benzimidazol-2-yl]sulfinyl]methyl]-2-pyridinamine;

6-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-(2,2-dimethylpropyl)-2-pyridinamine;

5 6-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-ethyl-2-pyridinamine; and

5-[(1H-benzimidazol-2-ylsulfinyl)methyl]-2-pyridinamine.

10 10. A method of treating viral infection in a subject, said method comprising treating said subject with an effective amount of a compound of Formula II



II

15

wherein X is selected from CH or N;
wherein Y is selected from CH₂, NR⁸, O

and S;

20

wherein Z is selected from -S(O)_m-,
-(CR³R⁴)_pS(O)_m- and -S(O)_m(CR⁵R⁶)_n-;

wherein each of m, n and p is a number independently selected from 0, 1 and 2;

25 wherein R¹ is selected from aryl and heteroaryl, wherein R¹ is optionally substituted at a substitutable position with one or more radicals selected from alkoxy, aminoalkoxy optionally substituted on the nitrogen atom with alkyl, cycloalkyl and aralkyl, cyano, nitro, hydroxyl,
30 alkyl, halo, haloalkyl, haloalkoxy, cycloalkylalkoxy, carboxyl, acyl, alkanoyl, amide, alkylamide, aralkoxy, alkenyloxy, alkynyloxy, sulfonamido, dialkylsulfonamido, heterocyclic, aralkyl, heteroaralkyl, alkoxycarbonyl, heteroaryl,
35 alkylthio, alkylsulfinyl, alkylsulfonyl,

Sub. 27
5 alkenylthio, arylthio, aralkylthio, cycloalkylthio, alkylimino and amino optionally substituted with a radical selected from alkyl, aralkyl, aryl, alkenyl, alkynyl, cycloalkyl, acyl, cycloalkenyl, hydroxyalkyl, alkoxycarbonyl and alkoxyalkyl; wherein each of R³, R⁴, R⁵ and R⁶ is independently selected from hydrido, alkyl, aryl and aralkyl;

10 wherein R⁷ is one or more radicals selected from alkoxy, amino, cyano, nitro, hydroxyl, alkyl, cycloalkyl, halo, haloalkyl, haloalkoxy, carboxyl, alkanoyl, acyl, alkylamino, arylamino, alkylaryl amino, alkanoylamino, alkylaminoalkyl, amide, alkylamide, alkoxycarbonyl, 15 aryloxy carbonyl, aralkoxy carbonyl, alkyl carbonyl, cycloalkyl carbonyl, alkyl carbonyl alkyl, alkoxycarbonyl alkyl, dialkyl carbamoyl, carbamoyloxy, aryloxy, aralkoxy, alkenyloxy, alkynyloxy, acyloxy, cycloalkyl alkoxy, aralkyl, 20 aryl, aroyl, alkoxyalkyl, hydroxyalkyl, heterocyclic, heteroaralkyl, alkylthio, alkylsulfinyl, alkylsulfonyl, arylthio, arylsulfinyl, alkylsulfonyl, sulfonamido and alkylsulfonamido; or wherein R⁵ and R⁸ taken 25 together form a ring; and

wherein R⁸ is selected from hydrido, alkyl, alkenyl, hydroxyalkyl, acyl, alkoxyalkyl, aryl, aryloxyalkyl, alkylthioalkyl, aralkyl, alkoxycarbonyl, amide, alkanoyl, alkylcarbamoyl and 30 alkylsulfonyl; provided that when m is 0, R⁸ is not 1-(β-D-ribofuranosyl)benzimidazole;

or a pharmaceutically acceptable salt thereof.

35 11. Method of Claim 10 wherein R¹ is selected from phenyl, naphthyl, thiazolyl, thiazolinyl, thiadiazolyl, oxazolyl, isoxazolyl,

pyrazolyl, imidazolyl, imidazolynyl, pyridyl, quinolyl, dihydroquinolyl, tetrahydroquinolyl, isoquinolyl, azaquinolyl, azaisoquinolyl, tetrahydroisoquinolyl, thiatetrahydroisoquinolyl, imidazopyridyl, azachromanyl, cycloheptenopyridine, benzimidazolyl, benzothiazolyl, benzoxazinyl, pyridazinyl, purinyl, thienyl, furyl, azaimidazopyridyl, piperidyl, thienopyridinyl, dihydrothienopyridinyl, carbostyryl, pyrimidyl and pyrazinyl, wherein R¹ is optionally substituted at a substitutable position with one or more radicals selected from lower alkoxy, lower aminoalkoxy optionally substituted on the nitrogen atom with lower alkyl, lower cycloalkyl and lower aralkyl, cyano, nitro, hydroxyl, lower alkyl, halo, lower haloalkyl, lower haloalkoxy, lower cycloalkylalkoxy, carboxyl, acyl, lower alkanoyl, amide, lower alkylamide, lower aralkoxy, lower alkenyloxy, lower alkynyloxy, sulfonamido, lower dialkylsulfonamido, 5 to 20 membered heterocyclic, lower aralkyl, lower heteroaralkyl, lower alkoxycarbonyl, 5 to 8 membered heteroaryl, lower alkylthio, lower alkylsulfinyl, lower alkylsulfonyl, lower alkenylthio, lower arylthio, lower aralkylthio, lower cycloalkylthio, lower alkylimino and amino optionally substituted with a radical selected from lower alkyl, lower aralkyl, phenyl, lower alkenyl, lower alkynyl, lower cycloalkyl, acyl, lower cycloalkenyl, lower hydroxyalkyl, lower alkoxycarbonyl and lower alkoxyalkyl, wherein each of R³, R⁴, R⁵ and R⁶ is independently selected from hydrido, lower alkyl, phenyl, naphthyl and lower aralkyl; wherein R⁷ is one or more radicals selected from lower alkoxy, amino, cyano, nitro, hydroxyl, lower alkyl, lower cycloalkyl, halo, lower haloalkyl, lower haloalkoxy, carboxyl, lower alkanoyl, acyl, lower

alkylamino, lower arylamino, lower alkylarylamino,
 lower alkanoylamino, lower alkylaminoalkyl, amide,
 lower alkylamide, lower alkoxycarbonyl, lower
 aryloxy, lower aralkoxy, lower alkenyloxy, lower
 alkynyloxy, acyloxy, lower cycloalkylalkoxy, lower
 aralkyl, optionally substituted lower aryl, lower
 aroyl, lower alkoxyalkyl, lower hydroxyalkyl, 5 to
 20 membered heterocyclic, lower heteroaralkyl,
 lower alkylthio, lower alkylsulfinyl, lower
 alkylsulfonyl, lower arylthio, lower arylsulfinyl,
 lower arylsulfonyl, sulfonamido and lower
 alkylsulfonamido; or wherein R⁵ and R⁸ taken
 together form a ring; and wherein R⁸ is selected
 from hydrido, lower alkyl, lower alkenyl, lower
 hydroxyalkyl, acyl, lower alkoxyalkyl, phenyl,
 naphthyl, lower aryloxyalkyl, lower alkylthioalkyl,
 lower aralkyl, lower alkoxycarbonyl, amide, lower
 alkanoyl, lower alkylcarbonyl and lower
 alkylsulfonyl; or a pharmaceutically acceptable
 salt thereof.

25

12. Method of Claim 11 wherein R¹ is
 optionally substituted at a substitutable position
 with one or more radicals selected from methoxy,
 ethoxy, propoxy, butoxy, isopropoxy, tert-butoxy,
 aminomethoxy optionally substituted on the nitrogen
 atom with methyl, ethyl, propyl, butyl, pentyl,
 isopropyl, isobutyl, tert-butyl, cyclohexyl,
 cyclopropyl and benzyl, amino optionally
 substituted with a radical selected from methyl,
 ethyl, propyl, butyl, pentyl, isopropyl, isobutyl,
 tert-butyl, benzyl, phenethyl, phenyl, butene,
 pentene, isopropylene, isobutylene, propargyl,

Sub: 7

- 5 butoxycarbonyl, propoxycarbonyl, n-butoxycarbonyl,
isobutoxycarbonyl, pentoxycarbonyl, and
methoxymethyl, cyano, nitro, hydroxyl, methyl,
ethyl, propyl, butyl, pentyl, isopropyl, isobutyl,
tert-butyl, fluoro, chloro, bromo, iodo,
10 fluoromethyl, difluoromethyl, trifluoromethyl,
dichloromethyl, trichloromethyl, pentafluoroethyl,
heptafluoropropyl, difluorochloromethyl,
dichlorofluoromethyl, difluoroethyl,
difluoropropyl, dichloroethyl, dichloropropyl,
15 trifluoromethoxy, cyclohexylmethoxy, carboxyl,
formyl, acetyl, propionyl, amide, methylamide,
dimethylamide, benzyloxy, sulfonamido,
dimethylsulfonamido, morpholinyl, pyrrolidinyl,
piperazinyl, piperidyl, benzyl, methoxycarbonyl,
20 ethoxycarbonyl, pyridyl, methylthio,
methylsulfinyl, methylsulfonyl, phenylthio,
benzylthio, cyclohexylthio and methylimino;
wherein each of R³, R⁴, R⁵ and R⁶ is independently
selected from hydrido, methyl, ethyl, propyl,
25 butyl, pentyl, isopropyl, isobutyl, tert-butyl,
phenyl and benzyl; wherein R⁷ is one or more
radicals selected from methoxy, ethoxy, propoxy,
butoxy, isopropoxy, tert-butoxy, amino, cyano,
nitro, hydroxyl, methyl, ethyl, propyl, butyl,
30 pentyl, isopropyl, isobutyl, tert-butyl,
cyclohexyl, cyclopropyl, cyclobutyl, fluoro,
chloro, bromo, iodo, fluoromethyl, difluoromethyl,
trifluoromethyl, dichloromethyl, trichloromethyl,
pentafluoroethyl, heptafluoropropyl,
35 difluorochloromethyl, dichlorofluoromethyl,
difluoroethyl, difluoropropyl, dichloroethyl,
dichloropropyl, trifluoromethoxy, trifluoroethoxy,

- Sub. 027
- 2-[[3-methylpyridin-2-ylmethyl]sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-1H-benzimidazole;
- 5 2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-5-methyl-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-5-methoxy-1H-benzimidazole;
- 10 5-chloro-2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-3-ylmethyl)sulfinyl]-5-trifluoromethyl-1H-benzimidazole;
- 15 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-5-methoxy-1H-benzimidazole;
- 20 5-ethoxy-2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-4-methyl-1H-benzimidazole;
- 25 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-5-methyl-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-5,6-dimethyl-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-5,6-dimethoxy-1H-benzimidazole;
- 30 5-chloro-2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-1H-benzimidazole;
- 2-[(imidazo[1,2-a]pyridin-8-ylmethyl)sulfinyl]-5-trifluoromethyl-1H-benzimidazole;
- 35 2-[[2,3-dimethylimidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;

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- Sub. 127
- 2-[[[3-methylimidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 2-[[[2-phenylimidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 5 2-[[[3-phenylimidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 2-[[[3-(4-trophenyl)imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 2-[[[3-[3-(trifluoromethyl)phenyl]imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 10 5-methyl-2-[[[3-[3-(trifluoromethyl)phenyl]imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 15 5-chloro-2-[[[3-[3-(trifluoromethyl)phenyl]imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 2-[[[3-[4-(trifluoromethyl)phenyl]imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 20 5-chloro-2-[[[3-[4-(trifluoromethyl)phenyl]imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 4-[8-[(1H-benzimidazol-2-ylsulfinyl)methyl]imidazo[1,2-a]pyridin-3-yl]benzoate;
- 25 2-[[[3-(4-chlorophenyl)imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 2-[[[3-(4-methylphenyl)imidazo[1,2-a]pyridin-8-yl)methyl]sulfinyl]-1H-benzimidazole;
- 30 2-[(imidazo[1,2-a]pyridin-5-ylmethyl)sulfinyl]-1H-benzimidazole;
- 4,6-dimethyl-2-(((imidazo[1,2-a]pyridin-2-yl)methyl)thio)-1H-benzimidazole;
- 2-[3-methyl-4-(2-(N-benzyl-N-cyclohexylamino)-ethoxy)pyridyl]methylthio-1H-benzimidazole;
- 35 ethyl 2-[(1H-benzimidazol-2-yl)thiomethyl]-4-methyl-amino-5-pyrimidine carboxylate;

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- Sub. co 7
- 2-(((4-(2-benzyloxyethoxy)-3-methyl-2-pyridyl)
methylthio)benzimidazole;
2-[2-[N-(2-hydroxyethyl)-N-methylamino]-5-methoxy]
benzylsulfinyl]benzimidazole;
5 2-(5-benzyl-4-chloro-6-methyl-2-pyrimidinyl)
methylthio-1H-benzimidazole;
5-carboethoxy-6-methyl-2-(((3-methyl-2-
pyridyl)methyl)sulfinyl)-1H-benzimidazole;
5-(2-benzimidazolylsulfinylmethyl)-3,4-dihydro-
10 4-methyl-2H-1,4-benzoxazine;
2-(3-methyl-4-(2-(N-benzyl-N-methylamino)ethoxy-2-
pyridyl)methylsulfinyl)-1H-benzimidazole;
2-(3-methyl-4-(2-(1,2,3,4-tetrahydroisoquinolin-
2-yl)-ethoxy)-2-pyridyl)methylsulfinyl-1H-
15 benzimidazole;
2-[1-(3,5-dimethylpyrazolyl)]
methylthiobenzimidazole;
2-(3-chloro-4-methoxy-2-picolylthio)-5-methoxy-1H-
benzimidazole;
20 2-(4-(2-ethoxyethoxy)-3-methyl-2-pyridyl)
methylsulfinyl-1H-benzimidazole;
2-(3-methylthieno(2,3-c)pyridin-7-yl)
methylsulfinyl)-benzimidazole;
2-(2-dimethylamino-5-methoxybenzylsulfinyl)-5-
25 methoxy-benzimidazole;
2-(2-dimethylamino-5-methylbenzylsulfinyl)-5-
methoxybenzimidazole;
2-[4-(2,3,5-trimethyl)pyridylthio]-5-
methoxybenzimidazole;
30 2-[(2-(4-chlorophenyl)-5-methylimidazol-4-
yl)methylthio]benzimidazole;
2-(5-hydroxy-1H-benzimidazol-2-ylsulfinylmethyl)-
N,N-dimethylbenzenamine;
2-((6-methoxyisoquinolin-1-yl)methylsulfinyl)
35 benzimidazole;
3-(5-methoxy-1H-benzimidazol-2-
yl)thiomethylcarbostyryl;

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- Sub. est*
- 5-methoxy-2-(4-dimethylamino-5-fluoro-2-pyridylmethylsulfinyl)-1H-benzimidazole;
 2-(2-dimethylaminobenzylsulfinyl)-5-cyclopropylmethoxybenzimidazole;
 5 2-(3,5-dimethyl-2-pyridylmethylsulfinyl)-5-cyclopropylmethoxy-benzimidazole;
 2-[2-(N-cyclohexyl-N-methylamino)benzylsulfonyl]benzimidazole;
 8-(5-fluoro-6-methoxy-2-benzimidazolyl)sulfinylmethyl-1-ethyl-4-(N-methyl-N-allyl)amino-1,2,3,4-tetrahydroquinoline;
 10 2-(2-benzyloxycarbonylaminobenzylthio)benzimidazole;
 2-(2-benzimidazolylmethylthio)pyrimidine;
 15 5-acetyl-2-((2-dimethylaminobenzyl)sulfinyl)benzimidazole;
 2-((3,5-dimethyl-4-methoxy-2-pyridyl)methylsulfinyl)-5-fluoro-1H-benzimidazole;
 2-(3-pyridylmethylthio)-5-methoxybenzimidazole;
 20 2-(2-methylaminobenzylsulfinyl)benzimidazole;
 5-methoxy-2-(2-dimethylaminobenzylsulfinyl)-1H-benzimidazole;
 2-(3,4-dimethoxypyrid-2-ylmethylsulfinyl)-5-trifluoromethyl-benzimidazole;
 25 5-methoxy-2-(4-piperidino-2-pyrimidinylmethylsulfinyl)-(1H)-benzimidazole;
 2-[2-(4-benzyloxy)-pyridylmethylsulfinyl]benzimidazole;
 4-allyloxy-8-(2-benzimidazolyl)thio-3-methyl-5,6,7,8-tetrahydroquinoline;
 30 2-[2-(4-methoxy-5-n-pentyl)-pyridylmethylthio]benzimidazole;
 2-(5-bromo-4-piperidino-2-pyridylmethylsulfinyl)-5-methoxy-(1H)-benzimidazole;
 35 2-((3,5-dimethyl-4-morpholinopyrid-2-yl)methylsulfinyl)benzimidazole;
 2-((2-pyridinylmethyl)sulfinyl)-1H-benzimidazole-1-

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2-[[(4-methyl-1H-benzimidazol-2-yl)sulfinyl]methyl]
benzenamine;

5 2-[[[(5,6-dimethyl-1H-benzimidazol-2-yl)sulfinyl]methyl]benzenamine;

2-[[(5-methoxy-1H-benzimidazol-2-yl) sulfinyl]
methyl]benzenamine;

10 methyl 2-[[[(2-aminophenyl)methyl]sulfinyl]-5-methoxy-1H-benzimidazole-6-carboxylate;

2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-chlorobenzenamine;

2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-5-chlorobenzeneamine;

15 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-
methoxybenzenamine;

2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-6-methoxybenzenamine;

20 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-3-methylbenzenamine;

2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-methylbenzenamine;

2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-6-methylbenzenamine;

25 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4,6-
dimethylbenzenamine;

2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-methylbenzenamine;

2-[[(5-methoxy-1H-benzimidazol-2-yl)sulfinyl]
30 methyl]-4-methylbenzenamine;

2-[[(5-methoxy-1H-benzimidazol-2-yl) sulfinyl] methyl]-6-methylbenzenamine;

2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-ethylbenzenamine;

35 2-[(1H-benzimidazol-2-ylsulfanyl)methyl]-6-ethylbenzenamine;

[illegible]

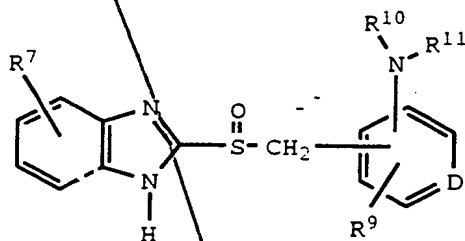
- Sub. 27
- 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-methoxy-
3,5-dimethylbenzenamine;
- 2-[[[(5-methyl-1H-benzimidazol-2-yl)sulfinyl]-
methyl]benzenamine;
- 5 2-[[[(5-chloro-1H-benzimidazol-2-yl)sulfinyl]-
methyl]benzenamine;
- 2-[[[(5-ethoxy-1H-benzimidazol-2-yl)sulfinyl]-
methyl]benzenamine;
- 2-[[[(5-(trifluoromethyl)-1H-benzimidazol-2-
yl)sulfinyl]methyl]benzenamine;
- 10 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-
(trifluoromethyl)benzenamine;
- 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-
butylbenzenamine;
- 15 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-5,6-
dimethylbenzenamine;
- 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-3,6-
dimethylbenzenamine;
- 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-chloro-
20 6-methylbenzenamine;
- 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-chloro-6-
methoxy-3-methylbenzenamine;
- 2-[[[(5-ethoxy-1H-benzimidazol-2-yl)sulfinyl]-
methyl]-4-methylbenzenamine;
- 25 2-[[[(5-methyl-1H-benzimidazol-2-yl)sulfinyl]-
methyl]-5,6-dimethylbenzenamine;
- 2-[[[(5-(trifluoromethyl)-1H-benzimidazol-2-
yl)sulfinyl]-3,6-dimethylbenzenamine;
- 2-[[[(5-(trifluoromethyl)-1H-benzimidazol-2-
yl)sulfinyl]methyl]-6-methoxybenzenamine;
- 30 methyl 2-amino-3-[(1H-benzimidazol-2-ylsulfinyl)
methyl]benzoate;
- ethyl 4-amino-3-[(1H-benzimidazol-2-
ylsulfinyl)methyl]benzoate;
- 35 ethyl 4-amino-3-[[[(5-methoxy-1H-benzimidazol-2-
yl)sulfinyl]methyl]benzoate;

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- 2-[[5,6-dimethoxy-1H-benzimidazol-2-yl)sulfinyl)methyl]-4-methylbenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-fluorobenzenamine;
5 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-3,4,5-trimethylbenzenamine;
2-[[5-methoxy-1H-benzimidazol-2-yl)sulfinyl)methyl]-4-methoxy-3,5-dimethylbenzenamine;
3-[(1H-benzimidazol-2-ylsulfinyl)methyl]benzenamine;
10 3-[(1H-benzimidazol-2-ylsulfinyl)methyl]-2-pyridinamine;
3-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N,N-dimethyl-2-pyridinamine;
15 6-[(1H-benzimidazol-2-ylsulfinyl)methyl]-2-pyridinamine;
6-[[4-methyl-1H-benzimidazol-2-yl)sulfinyl)methyl]-2-pyridinamine;
6-[[5-methyl-1H-benzimidazol-2-yl)sulfinyl)methyl]-2-pyridinamine;
20 6-[[5-methoxy-1H-benzimidazol-2-yl)sulfinyl)methyl]-2-pyridinamine;
6-[[5-chloro-1H-benzimidazol-2-yl)sulfinyl)methyl]-2-pyridinamine;
25 6-[[[5-(trifluoromethyl)-1H-benzimidazol-2-yl)sulfinyl)methyl]-2-pyridinamine;
6-[[5-ethoxy-1H-benzimidazol-2-yl)sulfinyl)methyl]-2-pyridinamine;
6-[[5,6-dimethoxy-1H-benzimidazol-2-yl)sulfinyl)methyl]-2-pyridinamine;
30 6-[[5,6-dimethyl-1H-benzimidazol-2-yl)sulfinyl)methyl]-2-pyridinamine;
6-[[4,6-dimethyl-1H-benzimidazol-2-yl)sulfinyl)methyl]-2-pyridinamine;
35 6-[[[5-(hydroxymethyl)-1H-benzimidazol-2-yl)sulfinyl)methyl]-2-pyridinamine;

- 6-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-(2,2-dimethylpropyl)-2-pyridinamine;
 6-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-ethyl-2-pyridinamine; and
 5 5-[(1H-benzimidazol-2-ylsulfinyl)methyl]-2-pyridinamine.

14. A method of inhibiting a viral protease, said method comprising treating said
 10 subject with an effective amount of a compound of Formula III



III

- 15 wherein D is N or CH;
 wherein R⁷ is one or more radicals selected from hydrido, alkoxy, amino, cyano, nitro, hydroxyl, alkyl, halo, haloalkyl, carboxyl, alkanoyl, nitro, amino, alkylamino, amide,
 20 alkylamide, alkoxy carbonyl, alkylthio, alkylsulfinyl and alkylsulfonyl;
 wherein R⁹ is one or more radicals selected from hydrido, alkoxy, amino, alkyl, halo, cyano, nitro, hydroxyl, haloalkyl, carboxyl,
 25 alkanoyl, nitro, amide, alkylamide, alkoxy carbonyl, alkylthio, alkylsulfinyl and alkylsulfonyl; and
 wherein R¹⁰ and R¹¹ are independently selected from hydrido and alkyl;
 or a pharmaceutically acceptable salt
 30 thereof.

15. Method of Claim 14 wherein R⁷ is one or more radicals selected from hydrido, lower

alkoxy, amino, cyano, nitro, hydroxyl, lower alkyl, halo, lower haloalkyl, carboxyl, lower alkanoyl, lower alkylamino, amide, lower alkylamide, lower alkoxycarbonyl, lower alkylthio, lower alkylsulfinyl and lower alkylsulfonyl; wherein R⁹ is one or more radicals selected from hydrido, lower alkoxy, amino, lower alkyl, halo, cyano, nitro, hydroxyl, lower haloalkyl, carboxyl, lower alkanoyl, lower alkylamino, amide, lower alkylamide, lower alkoxycarbonyl, lower alkylthio, lower alkylsulfinyl and lower alkylsulfonyl; and wherein R¹⁰ and R¹¹ are independently selected from hydrido and lower alkyl; or a pharmaceutically acceptable salt thereof.

16. Method of Claim 15 wherein R⁷ is one or more radicals selected from hydrido, methoxy, ethoxy, propoxy, butoxy, isopropoxy, tert-butoxy, amino, cyano, nitro, hydroxyl, methyl, ethyl, propyl, butyl, pentyl, isopropyl, isobutyl, tert-butyl, fluoro, chloro, bromo, iodo, fluoromethyl, difluoromethyl, trifluoromethyl, dichloromethyl, trichloromethyl, pentafluoroethyl, heptafluoropropyl, difluorochloromethyl, dichlorofluoromethyl, difluoroethyl, difluoropropyl, dichloroethyl, dichloropropyl, carboxyl, formyl, acetyl, propionyl, N-methylamino, N-ethylamino, N-propylamino, N-butylamino, N-tert-butylamino, N-pentylamino, N-hexylamino, N,N-dimethylamino, amide, N-methylamide, N,N-dimethylamide, methoxycarbonyl, ethoxycarbonyl, isopropoxycarbonyl, tert-butoxycarbonyl, propoxycarbonyl, n-butoxycarbonyl, isobutoxycarbonyl, pentoxycarbonyl, methylthio, methylsulfinyl and methylsulfonyl;

wherein R⁹ is one or more radicals selected from hydrido, methoxy, ethoxy, propoxy,

butoxy, isopropoxy, tert-butoxy, amino, methyl,
 ethyl, propyl, butyl, pentyl, isopropyl, isobutyl,
 tert-butyl, fluoro, chloro, bromo, iodo, cyano,
 nitro, hydroxyl, fluoromethyl, difluoromethyl,
 5 trifluoromethyl, dichloromethyl, trichloromethyl,
 pentafluoroethyl, heptafluoropropyl,
 difluorochloromethyl, dichlorofluoromethyl,
 difluoroethyl, difluoropropyl, dichloroethyl,
 dichloropropyl, carboxyl, formyl, acetyl,
 10 propionyl, N-methylamino, N-ethylamino, N-
 propylamino, N-butylamino, N-tert-butylamino, N-
 pentylamino, N-hexylamino, N,N-dimethylamino,
 amide, N-methylamide, N,N-dimethylamide,
 methoxycarbonyl, ethoxycarbonyl,
 15 isopropoxycarbonyl, tert-butoxycarbonyl,
 propoxycarbonyl, n-butoxycarbonyl,
 isobutoxycarbonyl, pentoxycarbonyl, methylthio,
 methylsulfinyl and methylsulfonyl; and
 wherein R¹⁰ and R¹¹ are independently
 20 selected from hydrido, methyl, ethyl, propyl,
 butyl, pentyl, isopropyl, isobutyl and tert-butyl;
 or a pharmaceutically acceptable salt
 thereof.

25 17. Method of Claim 16 selected from
 compounds, and their pharmaceutically acceptable
 salts, of the group selected from:

2-[(1H-benzimidazol-2-ylsulfinyl)
 30 methyl]benzenamine;
 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]N,N-
 dimethylbenzenamine;
 N-[2-[(1H-benzimidazol-2-ylsulfinyl)methyl]phenyl]
 acetamide;
 35 2-[[[4-methyl-1H-benzimidazol-2-yl)sulfinyl)methyl]
 benzenamine;

- 2-[[(5,6-dimethyl-1H-benzimidazol-2-yl)sulfinyl)methyl]benzenamine;
2-[[(5-methoxy-1H-benzimidazol-2-yl)sulfinyl)methyl]benzenamine;
5 methyl 2-[[(2-aminophenyl)methyl)sulfinyl]-5-methoxy-1H-benzimidazole-6-carboxylate;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-chlorobenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-5-chlorobenzenamine;
10 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-methoxybenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-6-methoxybenzenamine;
15 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-3-methylbenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-methylbenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-6-methylbenzenamine;
20 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4,6-dimethylbenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-methylbenzenamine;
25 2-[[(5-methoxy-1H-benzimidazol-2-yl)sulfinyl)methyl]-4-methylbenzenamine;
2-[[(5-methoxy-1H-benzimidazol-2-yl)sulfinyl)methyl]-6-methylbenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-ethylbenzenamine;
30 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-6-ethylbenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-methoxy-3,5-dimethylbenzenamine;
35 2-[[(5-methyl-1H-benzimidazol-2-yl)sulfinyl)methyl]benzenamine;

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- 2-[[[(5-chloro-1H-benzimidazol-2-yl)sulfinyl]-
methyl]benzenamine;
2-[[[(5-ethoxy-1H-benzimidazol-2-yl)sulfinyl]-
methyl]benzenamine;
5 2-[[[(5-(trifluoromethyl)-1H-benzimidazol-2-
yl)sulfinyl]methyl]benzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-
(trifluoromethyl)benzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-
10 butylbenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-5,6-
dimethylbenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-3,6-
dimethylbenzenamine;
15 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-chloro-
6-methylbenzenamine;
2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-chloro-6-
methoxy-3-methylbenzenamine;
2-[[[(5-ethoxy-1H-benzimidazol-2-yl)sulfinyl]-
methyl]-4-methylbenzenamine;
20 2-[[[(5-methyl-1H-benzimidazol-2-yl)sulfinyl]-
methyl]-5,6-dimethylbenzenamine;
2-[[[(5-(trifluoromethyl)-1H-benzimidazol-2-
yl)sulfinyl]-3,6-dimethylbenzenamine;
25 2-[[[(5-(trifluoromethyl)-1H-benzimidazol-2-yl]
sulfinyl]methyl]-6-methoxybenzenamine;
methyl 2-amino-3-[(1H-benzimidazol-2-
ylsulfinyl)methyl]benzoate;
ethyl 4-amino-3-[(1H-benzimidazol-2-
ylsulfinyl)methyl]benzoate;
30 ethyl 4-amino-3-[[[(5-methoxy-1H-benzimidazol-2-
yl)sulfinyl]methyl]benzoate;
2-[[[(5,6-dimethoxy-1H-benzimidazol-2-
yl)sulfinyl]methyl]-4-methylbenzenamine;
35 2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-4-
fluorobenzenamine;

2-[(1H-benzimidazol-2-ylsulfinyl)methyl]-3,4,5-trimethylbenzenamine;
2-[[(5-methoxy-1H-benzimidazol-2-yl)sulfinyl]methyl]-4-methoxy-3,5-dimethylbenzenamine;
5 3-[(1H-benzimidazol-2-ylsulfinyl)methyl]benzenamine;
3-[(1H-benzimidazol-2-ylsulfinyl)methyl]-2-pyridinamine;
3-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N,N-dimethyl-2-pyridinamine;
10 6-[(1H-benzimidazol-2-ylsulfinyl)methyl]-2-pyridinamine;
6-[[(4-methyl-1H-benzimidazol-2-yl)-sulfinyl]methyl]-2-pyridinamine;
15 6-[[(5-methyl-1H-benzimidazol-2-yl)-sulfinyl]methyl]-2-pyridinamine;
6-[[(5-methoxy-1H-benzimidazol-2-yl)sulfinyl]-methyl]-2-pyridinamine;
6-[[(5-chloro-1H-benzimidazol-2-yl)-sulfinyl]methyl]-2-pyridinamine;
20 6-[[(5-(trifluoromethyl)-1H-benzimidazol-2-yl)sulfinyl]methyl]-2-pyridinamine;
6-[[(5-ethoxy-1H-benzimidazol-2-yl)-sulfinyl]methyl]-2-pyridinamine;
25 6-[[(5,6-dimethoxy-1H-benzimidazol-2-yl)-sulfinyl]methyl]-2-pyridinamine;
6-[[(5,6-dimethyl-1H-benzimidazol-2-yl)-sulfinyl]methyl]-2-pyridinamine;
6-[[(4,6-dimethyl-1H-benzimidazol-2-yl)-sulfinyl]methyl]-2-pyridinamine;
30 6-[[(5-(hydroxymethyl)-1H-benzimidazol-2-yl)sulfinyl]methyl]-2-pyridinamine;
6-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-(2,2-dimethylpropyl)-2-pyridinamine;
35 6-[(1H-benzimidazol-2-ylsulfinyl)methyl]-N-ethyl-2-pyridinamine; and

5-[(1H-benzimidazol-2-ylsulfinyl)methyl]-2-pyridinamine.

18. Method of Claim 14 wherein the viral
5 protease is a herpesvirus protease.

19. Method of Claim 18 wherein the viral protease is a CMV protease.

10 20. Method of Claim 19 wherein the viral
protease is a CMV protease, encoded by UL80.